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# Forest Products

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## *Change in 2004 from 2003:*

**U.S. trade deficit: Increased \$6.8 billion (44 percent) to \$22.0 billion**

**U.S. exports: Increased \$2.1 billion (9 percent) to \$25.6 billion**

**U.S. imports: Increased \$8.8 billion (23 percent) to \$47.6 billion**

Total trade in forest products increased in 2004 as both exports and imports posted gains in most commodity groups.<sup>1</sup> However, the trade deficit in forest products increased for the fifth consecutive year (table FP-1) as strong demand for wood products, driven by the continued strength of the U.S. housing market (both housing starts and residential repair and remodeling) in 2004,<sup>2</sup> accounted for increased imports in the top three product groups: lumber; wood veneer and wood panels; and moldings, millwork, and joinery (table FP-2). The increase in U.S. imports of the top five commodity groups accounted for 72 percent of the increase in total trade. Strong demand also sustained relatively high prices for wood products in 2004. On average, lumber prices were 30 percent higher and structural panel prices were 26 percent higher in 2004 than in 2003.<sup>3</sup>

Prior to 2004, U.S. demand for printing and writing paper had remained weak in spite of the economic recovery due to limited growth in white-collar employment and more intense competition from electronic communication.<sup>4</sup> However, shipments reportedly increased by approximately 1.3 million metric tons (MTs) (5 percent) in 2004 on the strength of moderately increased demand for coated and uncoated mechanical and coated freesheet papers,<sup>5</sup> which in part resulted from greater advertising and commercial printing.<sup>6</sup> Uncoated freesheet grades (e.g., reprographic papers, forms bond) have been particularly susceptible to competition from electronic technology,<sup>7</sup> and in 2004, U.S. producers' shipments for uncoated freesheet increased only 150,000 MTs, or 1 percent.<sup>8</sup> In an attempt to rebalance supply and demand, U.S. uncoated freesheet producers closed several mills in 2003<sup>9</sup> and were hopeful that imports would level off due to the declining value of the dollar versus foreign currencies and stronger demand in Europe and Asia.<sup>10</sup> Nonetheless, imports of uncoated freesheet increased more than \$1 billion (20 percent

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<sup>1</sup> In 2004, 13 of 16 commodity groups posted increases in exports, and 14 of 16 posted increases in imports.

<sup>2</sup> During 2003–2004, housing starts increased by 5.5 percent compared with a compound annual growth rate of 5.7 percent during the last 5 years. “New Privately Owned Housing Units Started,” found at <http://www.census.gov/const/startsan.pdf>, retrieved Mar. 29, 2005. Seasonally adjusted expenditures for repair and remodeling increased by 9.9 percent in 2004. “Expenditures for Residential Improvements and Repairs,” found at <http://www.census.gov/const/C50/histtab1.pdf>, retrieved Mar. 29, 2005.

<sup>3</sup> Framing lumber and structural panel composite prices, *Random Lengths 2004 Yearbook*, pp. 260, 273.

<sup>4</sup> “Uncoated Free-Sheet Recovering From Last Year’s Deep Downturn,” *Pulp & Paper*, Vol. 78, No. 4 (Apr. 2004), p. 7.

<sup>5</sup> “North American Printing/Writing Paper Shipments Rose in 2004,” found at <http://www.paperloop.com>, retrieved Mar. 29, 2005.

<sup>6</sup> “Coated Free-Sheet Look for Modest Recovery,” *Pulp & Paper*, Vol. 78, No. 3 (Mar. 2004), p. 7.

<sup>7</sup> “U.S. Uncoated Freesheet Shipments Experience Slow Demand Growth in 2004,” found at <http://www.paperloop.com>, retrieved Mar. 29, 2005.

<sup>8</sup> “North American Printing/Writing Paper Shipments Rose in 2004.”

<sup>9</sup> “Uncoated Free-Sheet Recovering From Last Year’s Deep Downturn,” p. 7.

<sup>10</sup> “Coated Free-Sheet Look for Modest Recovery,” p. 7.

Table FP-1

Forest products: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2000–2004<sup>1</sup>

Item	2000	2001	2002	2003	2004	Change, 2004 from 2003	
						Absolute	Percent
Million dollars							
U.S. exports of domestic merchandise:							
Canada	7,858	7,462	7,502	7,960	8,536	577	7.2
China	787	820	1,058	1,314	1,651	337	25.6
Mexico	3,628	3,282	3,056	3,217	3,451	234	7.3
Japan	3,004	2,497	2,017	1,887	1,963	76	4.0
Brazil	260	223	204	190	212	22	11.8
Germany	790	671	558	565	608	43	7.6
United Kingdom	1,276	1,143	1,047	1,014	1,118	105	10.3
Korea	808	561	659	699	696	-4	-0.5
Italy	737	636	627	674	718	44	6.5
Finland	18	18	21	22	22	1	3.1
All other	7,268	6,430	6,075	6,025	6,663	637	10.6
Total	26,434	23,743	22,825	23,566	25,637	2,072	8.8
EU-15	4,834	4,240	3,852	3,921	4,265	343	8.8
OPEC	625	516	465	418	494	76	18.2
Latin America	5,769	5,170	4,769	4,844	5,341	497	10.3
CBERA	1,088	985	945	906	999	92	10.2
Asia	6,537	5,570	5,473	5,571	6,052	482	8.6
Sub-Saharan Africa	159	148	120	135	140	5	3.5
Central and Eastern Europe	69	79	77	88	108	19	22.0
U.S. imports of merchandise for consumption:							
Canada	24,782	23,449	22,311	22,640	27,584	4,943	21.8
China	1,967	2,168	2,749	3,362	4,398	1,037	30.8
Mexico	1,055	999	1,038	1,075	1,274	199	18.5
Japan	652	542	600	610	683	73	12.0
Brazil	1,145	1,145	1,288	1,569	2,203	634	40.4
Germany	893	906	1,031	1,057	1,461	403	38.1
United Kingdom	875	805	729	751	784	34	4.5
Korea	394	348	404	467	517	51	10.9
Italy	447	403	392	396	416	20	5.1
Finland	741	718	773	948	1,107	159	16.8
All other	5,244	5,195	5,733	5,895	7,164	1,269	21.5
Total	38,195	36,678	37,048	38,769	47,591	8,822	22.8
EU-15	4,504	4,371	4,778	5,109	6,090	980	19.2
OPEC	696	610	547	537	562	25	4.6
Latin America	2,936	2,933	3,268	3,680	4,935	1,255	34.1
CBERA	102	113	124	123	124	(2)	0.2
Asia	5,085	4,960	5,662	6,317	7,651	1,333	21.1
Sub-Saharan Africa	141	119	121	139	178	38	27.6
Central and Eastern Europe	36	57	56	61	98	38	61.6

See footnote(s) at end of table.

Table FP-1—*Continued*

Forest products: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2000–2004<sup>1</sup>

						Change, 2004 from 2003	
Item	2000	2001	2002	2003	2004	Absolute	Percent
	Million dollars						
U.S. merchandise trade balance:							
Canada	-16,924	-15,987	-14,809	-14,680	-19,047	-4,367	-29.7
China	-1,180	-1,348	-1,691	-2,048	-2,747	-700	-34.2
Mexico	2,573	2,283	2,018	2,142	2,177	35	1.7
Japan	2,352	1,955	1,417	1,278	1,280	3	0.2
Brazil	-884	-922	-1,083	-1,380	-1,991	-611	-44.3
Germany	-104	-235	-473	-493	-853	-360	-73.1
United Kingdom	401	338	318	263	334	71	27.0
Korea	413	212	255	232	178	-54	-23.4
Italy	290	233	235	278	302	24	8.6
Finland	-723	-699	-752	-926	-1,084	-159	-17.1
All other	2,024	1,235	342	130	-501	-631	( <sup>3</sup> )
Total	-11,761	-12,935	-14,223	-15,204	-21,953	-6,750	-44.4
EU-15	331	-132	-926	-1,188	-1,825	-637	-53.6
OPEC	-71	-94	-82	-120	-68	51	42.8
Latin America	2,833	2,236	1,500	1,164	406	-758	-65.1
CBERA	986	872	821	783	875	92	11.8
Asia	1,452	610	-189	-747	-1,598	-852	-114.1
Sub-Saharan Africa	18	28	-1	-4	-38	-34	-808.1
Central and Eastern Europe	33	22	21	27	9	-18	-66.3

<sup>1</sup>Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

<sup>2</sup>Less than \$500,000.

<sup>3</sup>Not meaningful for purposes of comparison.

Note.—Calculations based on unrounded data. The countries shown are those with the largest total U.S. trade (U.S. imports plus exports) in these products in 2004.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Table FP-2

Leading changes in U.S. exports and imports of forest products, 2000–2004<sup>1</sup>

Industry/commodity group	2000	2001	2002	2003	2004	Change, 2004 from 2003	
						Absolute	Percent
	Million dollars						
U.S. EXPORTS:							
Increases:							
Industrial papers and paperboards (AG061) . . . . .	5,659	5,403	5,228	5,312	5,733	421	7.9
Wood pulp and wastepaper (AG059) . . . . .	4,619	3,711	3,853	4,112	4,521	408	9.9
Decreases:							
Wooden containers (AG055) . . . . .	197	150	135	154	145	-9	-5.9
All other . . . . .	15,958	14,479	13,609	13,987	15,239	1,252	8.9
TOTAL . . . . .	26,434	23,743	22,825	23,566	25,637	2,072	8.8
U.S. IMPORTS:							
Increases:							
Lumber (AG052) . . . . .	7,071	6,854	6,647	6,007	8,808	2,801	46.6
Wood veneer and wood panels (AG054) . . . . .	3,471	3,280	3,730	4,938	7,115	2,178	44.1
Moldings, millwork, and joinery (AG053) . . . . .	2,518	2,521	2,866	3,057	4,184	1,127	36.9
Printing and writing papers (AG063) . . . . .	4,977	4,761	4,372	4,549	5,564	1,015	22.3
Industrial papers and paperboards (AG061) . . . . .	3,157	3,276	3,464	3,492	4,240	748	21.4
Decreases:							
Certain specialty papers (AG064) . . . . .	1,138	1,067	909	1,046	817	-229	-21.9
All other . . . . .	15,863	14,919	15,061	15,680	16,862	1,182	7.5
TOTAL . . . . .	38,195	36,678	37,048	38,769	47,591	8,822	22.8

<sup>1</sup>Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

Note.—Calculations based on unrounded data.

Source: Compiled from official statistics of the U.S. Department of Commerce.

by quantity) in 2004, reflecting new production capacity in Asia<sup>11</sup> and the availability of inexpensive printing and writing papers, which reportedly limited growth in U.S. shipments.<sup>12</sup>

U.S. imports of industrial papers and paperboard, which are mostly supplied by Canada, increased \$748 million (21 percent) to \$4.2 billion in 2004. Improved U.S. packaging demand was attributed to generally low inventories of finished goods and a decrease in the value of the dollar versus foreign currencies, which tends to encourage U.S. exports and increase demand for boxes.<sup>13</sup> Overall, consumption of containerboard by U.S. corrugated container manufacturers increased 4 percent,<sup>14</sup> reversing a decline in box demand that started in 2001 and, according to one industry source, solidifying order positions enabling U.S. producers of certain grades of paperboard to increase prices late in 2004.<sup>15</sup>

Increases in U.S. exports of forest products were more moderate by comparison, with the largest gains in industrial paper and paperboard and in wood pulp and waste paper (see table FP-2). U.S. paperboard exports to Canada and Japan benefited from favorable exchange rates, and several U.S. producers of paperboard anticipated favorable exchange rate trends to sustain increased exports and domestic price levels in 2005.<sup>16</sup> The large domestic supply of waste paper as well as increased recycling efforts<sup>17</sup> have enabled significant cross-border trade with Canada and Mexico. Asian countries (e.g., China and Korea) with limited domestic wood supplies were also important markets for U.S. wood pulp and waste paper in 2004,<sup>18</sup> especially China, which accounted for a large increase in the quantity of wood pulp exports that also benefit from favorable westbound transportation rates.

In 2004 the United States had trade surpluses in forest products with half of its top 10 trading partners (Mexico, Japan, the United Kingdom, Korea, and Italy). These surpluses combined, however, were far smaller than the U.S. deficit with Canada, which remained the largest sector trading partner and accounted for 49 percent of total U.S. sector trade (see table FP-1). China retained its position achieved in 2003 as the second-largest sector trading partner, accounting for 8 percent of total U.S. trade in forest products. Mexico and Japan accounted for 6 percent and 4 percent, respectively.

In 2004, Canada accounted for \$27.6 billion (58 percent) of U.S. sector imports. During 2004, total U.S.-Canadian trade in forest products increased \$5.5 billion to \$36.1 billion, attributable to Canada's significant forest resources, capacity in excess of domestic requirements, and close proximity to U.S. markets. Lumber, wood veneer and wood panels, and printing and writing papers were the top three import product groups by value, with imports of Canadian lumber and oriented strand board benefiting from the strong U.S. housing market and higher U.S. prices for those products in 2004. In 2004, Canada was the largest market for U.S. forest products, taking one-third of all U.S. exports.

The rapid development of the forest products industry in China is reflected in the growth of sector trade between China and the United States, which increased \$1.4 billion (29 percent) in 2004.<sup>19</sup> Top forest product group imports from China in 2004 were printed matter; miscellaneous paper products; and

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<sup>11</sup> Ibid.

<sup>12</sup> "U.S. Uncoated Freesheet Shipments Experience Slow Demand Growth in 2004."

<sup>13</sup> "The Stage Is Set for Improved Packaging Demand in 2004," found at <http://www.packaging-online.com>, retrieved Mar. 30, 2005.

<sup>14</sup> Fibre Box Association, *Statistical Bulletin*, Dec. 2004.

<sup>15</sup> "U.S. Kraft Linerboard Jumps \$95/Ton; Box Demand Rebounds on 2% Growth," *Pulp & Paper*, Vol. 79, No. 1 (Jan. 2005), p. 19.

<sup>16</sup> Ibid.

<sup>17</sup> Fred Forstall, *Industry & Trade Summary: Wood Pulp and Waste Paper*, USITC publication 3490, Feb. 2002, p. 6, found at <ftp://ftp.usitc.gov/pub/reports/studies/PUB3490.PDF>, retrieved May 27, 2005.

<sup>18</sup> As a result of low domestic supplies of wood fiber, the paper industries are based primarily on recycled fiber or purchased wood pulp.

<sup>19</sup> From 2000 to 2004, forest products trade between the United States and China increased at an average compound annual growth rate of 22 percent.

moldings, millwork, and joinery. Ready access to world supplies of raw materials, in particular, high-quality logs and lumber from Siberia, has allowed China to focus production on a variety of wood products suitable for export.<sup>20</sup> As China has continued to grow as a global manufacturing center, its demand for paperboard and paper packaging has expanded,<sup>21</sup> driving in turn its demand for U.S. wood pulp, waste paper, and paperboard. In 2004, China alone accounted for 46 percent of U.S. waste paper exports by quantity .

During 2000–2004, the U.S. trade surplus in forest products with Latin America decreased at an average compound annual rate of 38 percent, from \$2.8 billion to \$406 million, in large measure because the U.S. sector trade deficit with Brazil (third-largest behind Canada and China in 2004) has grown steadily. The expanding forest products industry in Brazil enjoys a natural advantage resulting from the combination of fast-growing tree species and favorable growing conditions. That advantage was first manifest in the production of wood pulp and paper products and subsequently in the production of structural wood panels (e.g., plywood) and millwork. In 2004, solid wood products represented \$3.9 billion (10 percent) of Brazil’s agricultural exports.<sup>22</sup> Top product groups for U.S. imports from Brazil were moldings, millwork, and joinery; wood veneer and wood panels; and wood pulp and waste paper.

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<sup>20</sup> “China’s Wood Industry,” *Wood Markets*, Vol. 9, No. 7 (Sept. 2004), p. 1.

<sup>21</sup> “China’s Packaging Needs Won’t Diminish,” found at <http://www.packaging-online.com>, retrieved Mar. 30, 2005.

<sup>22</sup> “U.S. Imports From Overseas Soared in 2004, Exports Declined,” *Random Lengths International*, Vol. 38, No. 4 (Feb. 16, 2005), p. 2.

## Lumber

### *Change in 2004 from 2003:*

**U.S. trade deficit: Increased \$2.6 billion (61 percent) to \$6.9 billion**

**U.S. exports: Increased \$0.2 billion (12 percent) to \$1.9 billion**

**U.S. imports: Increased \$2.8 billion (47 percent) to \$8.8 billion**

Following 4 years of decline, total trade in lumber increased substantially in 2004. The trade deficit was characterized by an increase in imports that was more than 10 times the increase in exports (table FP-3).

This product group consists of softwood and hardwood lumber. In 2003 (the last year for which data are available), total U.S. consumption of lumber was estimated to be 67.6 billion board feet, of which 84 percent was accounted for by softwood lumber.<sup>23</sup>

Most softwood lumber is used in wood-frame construction of the sort typically consumed in U.S. residential construction; new home construction and residential repair and remodeling account for approximately 75 percent of U.S. softwood lumber consumption.<sup>24</sup> As a result of the continued strength of the U.S. housing market,<sup>25</sup> consumption of softwood lumber in 2004 increased 5 percent to 59.7 billion board feet, breaking the previous high set in 2003.<sup>26</sup>

Major end uses of hardwood lumber are pallets, furniture, millwork, cabinets, flooring, and railway ties.<sup>27</sup> During 1999–2003, U.S. consumption of hardwood lumber decreased at a compound annual rate of approximately 2 percent.<sup>28</sup>

Lumber prices are highly cyclical. Because supply is somewhat inelastic, changes in demand or inventory adjustments can cause wide variations in price. For example, the average U.S. price of framing lumber peaked in August 2004 at \$473 per thousand board feet (MBF), approximately 75 percent higher than the low point in November 2002 (\$271 MBF).<sup>29</sup>

### **U.S. exports**

As a percentage of total U.S. lumber exports, softwood lumber declined steadily from \$752 million (34 percent) in 2000 to \$433 million (23 percent) in 2004. Despite a favorable exchange rate and strong demand in overseas markets, the quantity of U.S. softwood lumber exports declined, although the value increased moderately. U.S. producers' focus on the strong domestic market limited the quantity of lumber available for export.<sup>30</sup> However, quantities of softwood lumber exports to Mexico and China grew

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<sup>23</sup> "Lumber Use in U.S. at an All-Time High," *Woodshop News*, Vol. 19, No. 5 (Apr. 2005), p. 9; and Hardwood Market Report, 2004: *The Year at a Glance*, p. 13.

<sup>24</sup> "Lumber Use in U.S. at an All-Time High," p. 9.

<sup>25</sup> During the last 5 years, U.S. housing starts have increased at a compound annual growth rate of 5.7 percent. In 2004, housing starts increased by 5.5 percent. See "New Privately Owned Housing Units Started." Seasonally adjusted expenditures for repair and remodeling increased by 9.9 percent in 2004. See "Expenditures for Residential Improvements and Repairs."

<sup>26</sup> U.S. softwood lumber demand is based on estimates made by the Western Wood Products Association. "Lumber Use in U.S. at an All-Time High," p. 9.

<sup>27</sup> Hardwood Market Report, 2004: *The Year at a Glance*, p. 13.

<sup>28</sup> Ibid.

<sup>29</sup> Figures are the Random Lengths framing lumber composite prices during 2000–2004. "Framing Lumber and Structural Panel Composite Prices," *Random Lengths 2004 Yearbook*, pp. 260, 273.

<sup>30</sup> "U.S. Imports From Overseas Soared in 2004, Exports Declined," p. 2.

17 percent and 23 percent, respectively, and exports of southern yellow pine to the Caribbean rose 11 percent due to post-hurricane rebuilding.<sup>31</sup>

In 2004, hardwood lumber exports increased 13 percent to \$1.5 billion. Export quantities increased 31,000 cubic meters (10 percent) to 326,000 cubic meters, following 4 years of decline as increased quantities of exports to the top two markets, Canada and China, offset declines in other markets for U.S. hardwood lumber. The quantity of U.S. exports to China increased by 39 percent in 2004 and at a compound annual growth rate of 34 percent during 2000–2004.

## **U.S. imports**

In 2004 the value of U.S. imports of lumber increased \$2.8 billion (47 percent) as a result of increases in the quantity of imports and in U.S. lumber prices. U.S. imports of lumber mainly consist of softwood lumber,<sup>32</sup> the demand for which is driven by housing starts.<sup>33</sup> Softwood lumber imports by quantity increased 33 percent to 22.6 billion board feet, attaining a record U.S. market share of 38 percent.<sup>34</sup> Canada remained the largest supplier to the U.S. market. During 2000–2004, the value of U.S. imports from Canada increased from \$6.2 billion to \$7.0 billion, although its share of U.S. imports by value declined steadily from 88 percent in 2000 to 79 percent in 2004.

U.S. imports from Europe increased during 2000–2004 by \$445 million (295 percent) to \$596 million; in 2004, relatively high U.S. lumber prices enabled European producers to withstand unfavorable exchange rates and continue shipping to the United States.<sup>35</sup> The principal products from Europe are dimension lumber, studs, and boards.<sup>36</sup> Germany and Austria were the largest European suppliers by quantity in 2004.<sup>37</sup> In 2004, U.S. imports from those countries were \$431 million, or 72 percent of total imports from the European Union. Likewise, U.S. imports from Latin America, particularly Brazil and Chile, have continued to increase, although shipments were reportedly scaled back in the second half of 2004 as U.S. prices declined.<sup>38</sup> The higher price of softwood lumber also accounts for much of the increase in value of U.S. softwood lumber imports in 2004. Although prices receded late in 2004, on average, lumber prices were 30 percent higher in 2004 than in 2003.<sup>39</sup>

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<sup>31</sup> Ibid., p. 7.

<sup>32</sup> During 2000–2004, softwood lumber accounted for more than 90 percent by value of total U.S. lumber imports.

<sup>33</sup> See footnote 25.

<sup>34</sup> “U.S. Imports From Overseas Soared in 2004, Exports Declined,” p. 1; and “Lumber Use in U.S. at an All-Time High,” p. 9.

<sup>35</sup> “U.S. Imports From Overseas Soared in 2004, Exports Declined,” p. 1; and “U.S. Lumber Imports Soar in 2004,” *Wood Markets*, Vol. 10, No. 2 (March 2005), p. 1.

<sup>36</sup> “U.S. Lumber Imports Soar in 2004,” p. 1.

<sup>37</sup> “U.S. Imports From Overseas Soared in 2004, Exports Declined,” p. 1.

<sup>38</sup> Ibid.

<sup>39</sup> Framing lumber and structural panel composite prices, *Random Lengths 2004 Yearbook*, pp. 260, 273.



Table FP-3

Forest products: U.S. trade for industry/commodity groups and subgroups, 2000–2004<sup>1</sup>

Product Groups for Industry/Commodity Groups and Subgroups, 2000-2004							Change, 2004 from 2003	
USITC code <sup>2</sup>	Industry/commodity group	2000	2001	2002	2003	2004	Absolute	Percent
Million dollars								
AG051	Logs and rough wood products:							
	Exports .....	1,941	1,622	1,490	1,468	1,708	241	16.4
	Imports .....	576	582	582	577	658	81	14.0
	Trade balance .....	1,365	1,039	907	891	1,051	160	17.9
AG052	Lumber:							
	Exports .....	2,210	1,781	1,720	1,725	1,930	205	11.9
	Imports .....	7,071	6,854	6,647	6,007	8,808	2,801	46.6
	Trade balance .....	-4,860	-5,073	-4,927	-4,282	-6,879	-2,597	-60.7
AG053	Moldings, millwork, and joinery:							
	Exports .....	553	467	443	495	551	56	11.4
	Imports .....	2,518	2,521	2,866	3,057	4,184	1,127	36.9
	Trade balance .....	-1,966	-2,054	-2,423	-2,563	-3,633	-1,070	-41.8
AG054	Wood veneer and wood panels:							
	Exports .....	1,029	889	928	905	1,037	132	14.6
	Imports .....	3,471	3,280	3,730	4,938	7,115	2,178	44.1
	Trade balance .....	-2,443	-2,391	-2,801	-4,033	-6,078	-2,045	-50.7
AG055	Wooden containers:							
	Exports .....	197	150	135	154	145	-9	-5.9
	Imports .....	565	555	612	605	635	30	5.0
	Trade balance .....	-369	-405	-477	-451	-490	-39	-8.7
AG056	Tools and tool handles of wood:							
	Exports .....	53	37	42	50	51	1	2.6
	Imports .....	136	130	131	139	151	11	8.0
	Trade balance .....	-82	-93	-89	-89	-99	-10	-11.1
AG057	Miscellaneous articles of wood:							
	Exports .....	193	175	167	167	188	21	12.5
	Imports .....	1,111	1,041	1,152	1,236	1,359	123	10.0
	Trade balance .....	-918	-866	-985	-1,069	-1,171	-102	-9.6
AG058	Cork and rattan:							
	Exports .....	86	53	61	65	57	-9	-13.6
	Imports .....	485	522	570	616	643	26	4.3
	Trade balance .....	-399	-469	-509	-551	-586	-35	-6.4
AG059	Wood pulp and wastepaper:							
	Exports .....	4,619	3,711	3,853	4,112	4,521	408	9.9
	Imports .....	3,388	2,650	2,371	2,603	2,953	350	13.4
	Trade balance .....	1,231	1,061	1,482	1,509	1,567	59	3.9

See footnote(s) at end of table.

Table FP-3—Continued

Forest products: U.S. trade for industry/commodity groups and subgroups, 2000–2004<sup>1</sup>

USITC code <sup>2</sup> Industry/commodity group							Change, 2004 from 2003	
							Absolute	Percent
2000 2001 2002 2003 2004								
Million dollars								
AG060	Paper boxes and bags:							
	Exports .....	1,500	1,445	1,315	1,348	1,490	142	10.6
	Imports .....	940	1,011	1,121	1,231	1,357	126	10.3
	Trade balance .....	561	435	195	117	133	16	13.7
AG061	Industrial papers and paperboards:							
	Exports .....	5,659	5,403	5,228	5,312	5,733	421	7.9
	Imports .....	3,157	3,276	3,464	3,492	4,240	748	21.4
	Trade balance .....	2,503	2,127	1,764	1,819	1,492	-327	-18.0
AG061A	Paperboard:							
	Exports .....	3,621	3,165	3,538	3,723	3,993	269	7.2
	Imports .....	1,662	1,591	1,829	1,731	2,063	332	19.2
	Trade balance .....	1,959	1,574	1,709	1,992	1,930	-62	-3.1
AG061B	Tissue and tissue products:							
	Exports .....	1,119	1,283	1,211	1,094	1,166	72	6.6
	Imports .....	906	1,082	1,237	1,283	1,544	261	20.4
	Trade balance .....	214	201	-26	-188	-377	-189	-100.4
AG061C	Industrial paper:							
	Exports .....	919	954	480	494	573	79	16.1
	Imports .....	589	602	398	479	634	155	32.4
	Trade balance .....	330	352	81	15	-60	-76	( <sup>3</sup> )
AG062	Newsprint:							
	Exports .....	492	409	330	325	322	-3	-0.9
	Imports .....	3,789	3,597	3,039	2,991	2,975	-16	-0.5
	Trade balance .....	-3,297	-3,188	-2,709	-2,667	-2,653	14	0.5
AG063	Printing and writing papers:							
	Exports .....	1,522	1,308	620	625	692	67	10.7
	Imports .....	4,977	4,761	4,372	4,549	5,564	1,015	22.3
	Trade balance .....	-3,455	-3,453	-3,752	-3,924	-4,872	-948	-24.2
AG064	Certain specialty papers:							
	Exports .....	689	618	1,056	1,114	1,232	118	10.6
	Imports .....	1,138	1,067	909	1,046	817	-229	-21.9
	Trade balance .....	-449	-449	147	68	415	347	508.3
AG065	Miscellaneous paper products:							
	Exports .....	1,385	1,322	1,431	1,541	1,551	10	0.6
	Imports .....	1,385	1,295	1,740	1,779	1,900	121	6.8
	Trade balance .....	( <sup>4</sup> )	26	-309	-238	-350	-111	-46.8

See footnote(s) at end of table.

Table FP-3—*Continued*Forest products: U.S. trade for industry/commodity groups and subgroups, 2000–2004<sup>1</sup>

							Change, 2004 from 2003	
USITC code <sup>2</sup>	Industry/commodity group	2000	2001	2002	2003	2004	Absolute	Percent
		Million dollars						
AG066	Printed matter:							
	Exports .....	4,306	4,353	4,006	4,160	4,431	271	6.5
	Imports .....	3,489	3,536	3,742	3,901	4,230	330	8.4
	Trade balance .....	817	817	263	259	200	-59	-22.7

<sup>1</sup>Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

<sup>2</sup>This coding system is used by the U.S. International Trade Commission to identify major groupings and subgroupings of HTS import and export items for trade monitoring purposes

<sup>3</sup>Not meaningful for purposes of comparison.

<sup>4</sup>Less than \$500,000.

Note.—Calculations based on unrounded data.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Table FP-4

## Forest products sector: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 2000–2004

USITC code	Industry/commodity group	2000	2001	2002	2003	2004	Percent change, 2004 from 2003
AG051	Logs and rough wood products:						
	Number of establishments . . . . .	13,500	13,500	13,500	13,500	13,500	0.0
	Employees (thousands) . . . . .	83.0	84.0	84.0	84.0	84.0	0.0
	Capacity utilization (percent) . . . . .	95	93	93	93	93	0.0
	U.S. shipments (million dollars) . . . . .	50,400	44,000	44,000	49,000	55,500	13.3
	U.S. exports (million dollars) . . . . .	1,941	1,622	1,490	1,468	1,708	16.4
	U.S. imports (million dollars) . . . . .	576	582	582	577	658	14.0
	Apparent U.S. consumption (million dollars) . . . . .	49,035	42,961	43,093	48,109	54,449	13.2
	Trade balance (million dollars) . . . . .	1,365	1,039	907	891	1,051	17.9
	Ratio of imports to consumption (percent) . . . . .	1.2	1.4	1.4	1.2	1.2	0.0
	Ratio of exports to shipments (percent) . . . . .	3.9	3.7	3.4	3.0	3.1	3.3
AG052	Lumber:						
	Number of establishments . . . . .	5,200	5,000	5,000	5,000	5,000	0.0
	Employees (thousands) . . . . .	119.0	114.0	95.0	101.0	97.0	-4.0
	Capacity utilization (percent) . . . . .	92	89	89	89	89	0.0
	U.S. shipments (million dollars) . . . . .	23,900	22,100	22,800	22,500	22,200	-1.3
	U.S. exports (million dollars) . . . . .	2,210	1,781	1,720	1,725	1,930	11.9
	U.S. imports (million dollars) . . . . .	7,071	6,854	6,647	6,007	8,808	46.6
	Apparent U.S. consumption (million dollars) . . . . .	28,760	27,173	27,727	26,782	29,079	8.6
	Trade balance (million dollars) . . . . .	-4,860	-5,073	-4,927	-4,282	-6,879	-60.7
	Ratio of imports to consumption (percent) . . . . .	24.6	25.2	24.0	22.4	30.3	35.3
	Ratio of exports to shipments (percent) . . . . .	9.2	8.1	7.5	7.7	8.7	13.0
AG053	Moldings, millwork, and joinery:						
	Number of establishments . . . . .	5,200	5,200	5,200	5,200	5,200	0.0
	Employees (thousands) . . . . .	154.0	151.0	162.0	164.0	168.0	2.4
	Capacity utilization (percent) . . . . .	90	90	90	90	90	0.0
	U.S. shipments (million dollars) . . . . .	22,200	22,200	22,400	24,000	24,900	3.8
	U.S. exports (million dollars) . . . . .	553	467	443	495	551	11.4
	U.S. imports (million dollars) . . . . .	2,518	2,521	2,866	3,057	4,184	36.9
	Apparent U.S. consumption (million dollars) . . . . .	24,166	24,254	24,823	26,563	28,533	7.4
	Trade balance (million dollars) . . . . .	-1,966	-2,054	-2,423	-2,563	-3,633	-41.8
	Ratio of imports to consumption (percent) . . . . .	10.4	10.4	11.5	11.5	14.7	27.8
	Ratio of exports to shipments (percent) . . . . .	2.5	2.1	2.0	2.1	2.2	4.8

See footnote(s) at end of table.

Table FP-4—Continued

## Forest products sector: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 2000–2004

USITC code	Industry/commodity group	2000	2001	2002	2003	2004	Percent change, 2004 from 2003
AG054	Wood veneer and wood panels:						
	Number of establishments . . . . .	800	780	780	780	780	0.0
	Employees (thousands) . . . . .	76.0	71.0	66.0	67.0	60.0	-10.4
	Capacity utilization (percent) . . . . .	83	85	85	85	85	0.0
	U.S. production (million dollars) . . . . .	15,000	13,400	13,700	13,900	13,800	-0.7
	U.S. exports (million dollars) . . . . .	1,029	889	928	905	1,037	14.6
	U.S. imports (million dollars) . . . . .	3,471	3,280	3,730	4,938	7,115	44.1
	Apparent U.S. consumption (million dollars) . . . . .	17,443	15,791	16,501	17,933	19,878	10.8
	Trade balance (million dollars) . . . . .	-2,443	-2,391	-2,801	-4,033	-6,078	-50.7
	Ratio of imports to consumption (percent) . . . . .	19.9	20.8	22.6	27.5	35.8	30.2
	Ratio of exports to production (percent) . . . . .	6.9	6.6	6.8	6.5	7.5	15.4
AG055	Wooden containers:						
	Number of establishments . . . . .	2,800	2,800	2,800	2,800	2,800	0.0
	Employees (thousands) . . . . .	51.0	49.0	51.0	50.0	49.0	-2.0
	Capacity utilization (percent) . . . . .	85	85	85	85	85	0.0
	U.S. production (million dollars) . . . . .	5,100	4,700	5,100	5,100	5,200	2.0
	U.S. exports (million dollars) . . . . .	197	150	135	154	145	-5.9
	U.S. imports (million dollars) . . . . .	565	555	612	605	635	5.0
	Apparent U.S. consumption (million dollars) . . . . .	5,469	5,105	5,577	5,551	5,690	2.5
	Trade balance (million dollars) . . . . .	-369	-405	-477	-451	-490	-8.7
	Ratio of imports to consumption (percent) . . . . .	10.3	10.9	11.0	10.9	11.2	2.8
	Ratio of exports to production (percent) . . . . .	3.9	3.2	2.6	3.0	2.8	-6.7
AG056	Tools and tool handles of wood:						
	Number of establishments . . . . .	120	110	110	110	110	0.0
	Employees (thousands) . . . . .	1.0	1.0	1.0	1.0	1.0	0.0
	Capacity utilization (percent) . . . . .	75	75	75	75	75	0.0
	U.S. production (million dollars) . . . . .	135	108	100	101	103	2.0
	U.S. exports (million dollars) . . . . .	53	37	42	50	51	2.6
	U.S. imports (million dollars) . . . . .	136	130	131	139	151	8.0
	Apparent U.S. consumption (million dollars) . . . . .	217	201	189	190	202	6.3
	Trade balance (million dollars) . . . . .	-82	-93	-89	-89	-99	-11.1
	Ratio of imports to consumption (percent) . . . . .	62.4	64.6	69.2	73.3	74.5	1.6
	Ratio of exports to production (percent) . . . . .	39.5	34.1	41.7	49.7	50.0	0.6

See footnote(s) at end of table.

Table FP-4—Continued

## Forest products sector: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 2000–2004

USITC code	Industry/commodity group	2000	2001	2002	2003	2004	Percent change, 2004 from 2003
AG058	Cork and rattan:						
	Number of establishments . . . . .	30	30	30	30	30	0.0
	Employees (thousands) . . . . .	1.0	1.0	1.0	1.0	1.0	0.0
	Capacity utilization (percent) . . . . .	80	80	80	80	80	0.0
	U.S. production (million dollars) . . . . .	124	117	126	126	129	2.4
	U.S. exports (million dollars) . . . . .	86	53	61	65	57	-13.6
	U.S. imports (million dollars) . . . . .	485	522	570	616	643	4.3
	Apparent U.S. consumption (million dollars) . . . . .	523	586	635	677	715	5.7
	Trade balance (million dollars) . . . . .	-399	-469	-509	-551	-586	-6.4
	Ratio of imports to consumption (percent) . . . . .	92.7	89.1	89.8	91.0	89.9	-1.2
	Ratio of exports to production (percent) . . . . .	69.1	45.5	48.5	51.9	43.8	-15.6
AG059	Wood pulp and wastepaper:						
	Number of establishments . . . . .	68	67	66	65	65	0.0
	Employees (thousands) . . . . .	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
	Capacity utilization (percent) . . . . .	84	67	70	71	73	2.8
	U.S. production (million dollars) . . . . .	9,100	7,100	7,600	7,900	8,500	7.6
	U.S. exports (million dollars) . . . . .	4,619	3,711	3,853	4,112	4,521	9.9
	U.S. imports (million dollars) . . . . .	3,388	2,650	2,371	2,603	2,953	13.4
	Apparent U.S. consumption (million dollars) . . . . .	7,869	6,039	6,118	6,391	6,933	8.5
	Trade balance (million dollars) . . . . .	1,231	1,061	1,482	1,509	1,567	3.9
	Ratio of imports to consumption (percent) . . . . .	43.1	43.9	38.8	40.7	42.6	4.7
	Ratio of exports to production (percent) . . . . .	50.8	52.3	50.7	52.1	53.2	2.1
AG060	Paper boxes and bags:						
	Number of establishments . . . . .	3,021	3,036	2,787	2,752	2,719	-1.2
	Employees (thousands) . . . . .	228.0	220.0	197.0	192.0	187.0	-2.6
	Capacity utilization (percent) . . . . .	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )
	U.S. production (million dollars) . . . . .	50,900	48,500	45,500	51,900	53,400	2.9
	U.S. exports (million dollars) . . . . .	1,500	1,445	1,315	1,348	1,490	10.6
	U.S. imports (million dollars) . . . . .	940	1,011	1,121	1,231	1,357	10.3
	Apparent U.S. consumption (million dollars) . . . . .	50,339	48,065	45,305	51,783	53,267	2.9
	Trade balance (million dollars) . . . . .	561	435	195	117	133	13.7
	Ratio of imports to consumption (percent) . . . . .	1.9	2.1	2.5	2.4	2.5	4.2
	Ratio of exports to production (percent) . . . . .	2.9	3.0	2.9	2.6	2.8	7.7

See footnote(s) at end of table.

Table FP-4—Continued

## Forest products sector: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 2000–2004

USITC code	Industry/commodity group	2000	2001	2002	2003	2004	Percent change, 2004 from 2003
AG061A	Paperboard:						
	Number of establishments . . . . .	212	206	203	200	199	-0.5
	Employees (thousands) . . . . .	51.0	49.0	46.0	45.0	43.0	-4.4
	Capacity utilization (percent) . . . . .	90	87	90	90	88	-2.2
	U.S. production (million dollars) . . . . .	25,600	23,200	24,600	25,500	26,000	2.0
	U.S. exports (million dollars) . . . . .	3,621	3,165	3,538	3,723	3,993	7.2
	U.S. imports (million dollars) . . . . .	1,662	1,591	1,829	1,731	2,063	19.2
	Apparent U.S. consumption (million dollars) . . . . .	23,641	21,626	22,891	23,508	24,070	2.4
	Trade balance (million dollars) . . . . .	1,959	1,574	1,709	1,992	1,930	-3.1
	Ratio of imports to consumption (percent) . . . . .	7.0	7.4	8.0	7.4	8.6	16.2
	Ratio of exports to production (percent) . . . . .	14.1	13.6	14.4	14.6	15.4	5.5
AG061B	Tissue and tissue products:						
	Number of establishments . . . . .	84	82	82	84	85	1.2
	Employees (thousands) . . . . .	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
	Capacity utilization (percent) . . . . .	93	90	89	88	88	0.0
	U.S. production (million dollars) . . . . .	14,500	14,900	14,100	12,800	13,600	6.3
	U.S. exports (million dollars) . . . . .	1,119	1,283	1,211	1,094	1,166	6.6
	U.S. imports (million dollars) . . . . .	906	1,082	1,237	1,283	1,544	20.4
	Apparent U.S. consumption (million dollars) . . . . .	14,286	14,699	14,126	12,988	13,977	7.6
	Trade balance (million dollars) . . . . .	214	201	-26	-188	-377	-100.4
	Ratio of imports to consumption (percent) . . . . .	6.3	7.4	8.8	9.9	11.0	11.1
	Ratio of exports to production (percent) . . . . .	7.7	8.6	8.6	8.5	8.6	1.2
AG061C	Industrial paper:						
	Number of establishments . . . . .	73	71	70	69	69	0.0
	Employees (thousands) . . . . .	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
	Capacity utilization (percent) . . . . .	84	84	86	80	80	0.0
	U.S. production (million dollars) . . . . .	5,300	5,200	5,100	5,000	4,700	-6.0
	U.S. exports (million dollars) . . . . .	919	954	480	494	573	16.1
	U.S. imports (million dollars) . . . . .	589	602	398	479	634	32.4
	Apparent U.S. consumption (million dollars) . . . . .	4,970	4,848	5,019	4,985	4,760	-4.5
	Trade balance (million dollars) . . . . .	330	352	81	15	-60	( <sup>3</sup> )
	Ratio of imports to consumption (percent) . . . . .	11.9	12.4	7.9	9.6	13.3	38.5
	Ratio of exports to production (percent) . . . . .	17.3	18.4	9.4	9.9	12.2	23.2

See footnote(s) at end of table.

Table FP-4—Continued

## Forest products sector: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 2000–2004

USITC code	Industry/commodity group	2000	2001	2002	2003	2004	Percent change, 2004 from 2003
AG062	Newsprint:						
	Number of establishments . . . . .	24	24	20	19	19	0.0
	Employees (thousands) . . . . .	10.0	10.0	8.0	7.0	7.0	0.0
	Capacity utilization (percent) . . . . .	97	91	85	92	92	0.0
	U.S. shipments (million dollars) . . . . .	3,495	3,209	2,440	2,473	2,697	9.1
	U.S. exports (million dollars) . . . . .	492	409	330	325	322	-0.9
	U.S. imports (million dollars) . . . . .	3,789	3,597	3,039	2,991	2,975	( <sup>4</sup> )
	Apparent U.S. consumption (million dollars) . . . . .	6,792	6,397	5,149	5,140	5,350	4.1
	Trade balance (million dollars) . . . . .	-3,297	-3,188	-2,709	-2,667	-2,653	0.5
	Ratio of imports to consumption (percent) . . . . .	55.8	56.2	59.0	58.2	55.6	-4.5
	Ratio of exports to shipments (percent) . . . . .	14.1	12.7	13.5	13.1	11.9	-9.2
AG063	Printing and writing papers:						
	Number of establishments . . . . .	115	115	105	100	100	0.0
	Employees (thousands) . . . . .	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
	Capacity utilization (percent) . . . . .	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
	U.S. shipments (million dollars) . . . . .	24,267	21,511	21,600	20,900	23,000	10.0
	U.S. exports (million dollars) . . . . .	1,522	1,308	620	625	692	10.7
	U.S. imports (million dollars) . . . . .	4,977	4,761	4,372	4,549	5,564	22.3
	Apparent U.S. consumption (million dollars) . . . . .	27,722	24,964	25,352	24,824	27,872	12.3
	Trade balance (million dollars) . . . . .	-3,455	-3,453	-3,752	-3,924	-4,872	-24.2
	Ratio of imports to consumption (percent) . . . . .	18.0	19.1	17.2	18.3	20.0	9.3
	Ratio of exports to shipments (percent) . . . . .	6.3	6.1	2.9	3.0	3.0	0.0
AG064	Certain specialty papers:						
	Number of establishments . . . . .	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
	Employees (thousands) . . . . .	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
	Capacity utilization (percent) . . . . .	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
	U.S. shipments (million dollars) . . . . .	5,564	5,600	5,700	5,900	6,200	5.1
	U.S. exports (million dollars) . . . . .	689	618	1,056	1,114	1,232	10.6
	U.S. imports (million dollars) . . . . .	1,138	1,067	909	1,046	817	( <sup>4</sup> )
	Apparent U.S. consumption (million dollars) . . . . .	6,013	6,049	5,553	5,832	5,785	-0.8
	Trade balance (million dollars) . . . . .	-449	-449	147	68	415	508.3
	Ratio of imports to consumption (percent) . . . . .	18.9	17.6	16.4	17.9	14.1	-21.2
	Ratio of exports to shipments (percent) . . . . .	12.4	11.0	18.5	18.9	19.9	5.3

See footnote(s) at end of table.



Table FP-4—Continued

## Forest products sector: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 2000–2004

USITC code	Industry/commodity group	2000	2001	2002	2003	2004	Percent change, 2004 from 2003
AG066	Printed matter:						
	Number of establishments . . . . .	62,000	62,000	60,000	60,000	60,000	0.0
	Employees (thousands) . . . . .	1,500.0	1,500.0	1,400.0	1,400.0	1,300.0	-7.1
	Capacity utilization (percent) . . . . .	75	71	69	68	( <sup>1</sup> )	( <sup>1</sup> )
	U.S. shipments (million dollars) . . . . .	240,000	243,000	246,000	254,000	265,000	4.3
	U.S. exports (million dollars) . . . . .	4,306	4,353	4,006	4,160	4,431	6.5
	U.S. imports (million dollars) . . . . .	3,489	3,536	3,742	3,901	4,230	8.4
	Apparent U.S. consumption (million dollars) . . . . .	239,183	242,183	245,737	253,741	264,800	4.4
	Trade balance (million dollars) . . . . .	817	817	263	259	200	-22.7
	Ratio of imports to consumption (percent) . . . . .	1.5	1.5	1.5	1.5	1.6	6.7
	Ratio of exports to shipments (percent) . . . . .	1.8	1.8	1.6	1.6	1.7	6.3

<sup>1</sup> Not available.<sup>2</sup> Capacity utilization could not be meaningfully calculated for this industry.<sup>3</sup> Not meaningful.<sup>4</sup> Less than 0.05 percent.

Note.—Calculations based on unrounded data.

Source: These data have been estimated by the Commission's international trade analysts on the basis of primary and secondary data sources including discussions with various Government and industry contacts. These estimated data are subject to change either from secondary sources or from detailed surveys the Commission often conducts in the course of statutory investigations or other work. Further, these data may undergo adjustments based on revisions in tariff nomenclature, classification practices, or redefinitions of industry classes.